

HAWAII, ISLAND OF MAUI

1

16620000 HONOKOHAU STREAM NEAR HONOKOHAU

LOCATION.--Lat 20°57'45", long 156°35'22", Old Hawaiian Datum, Hydrologic Unit 20020000, on left bank 1,250 ft upstream from intake of Honokohau Ditch, and 4.1 mi southeast of Honokohau.

DRAINAGE AREA.--4.11 mi².

PERIOD OF RECORD.--September, November, and December 1911 (combined flow of stream and ditch below point of diversion), March 1913 to September 1920, May 1922 to November 1988, October 1990 to current year.

REVISED RECORDS.--WSP 1937: Drainage area. WDR HI-79-1: 1927-48(M), 1949-78(P). WDR HI-00-1: 1991-99 (P). GAGE.--Water-stage recorders. Elevation of gage is 870 ft above mean sea level (from topographic map). Prior to March 7,

1913, nonrecording gage at site just below Honokohau Ditch intake at different datum. Prior to October 1, 1990, at site 250 ft downstream of gage at datum 26.67 ft lower.

REMARKS.--Records computed by Matt Wong. Records fair. No diversion upstream of station. All medium and low flow, together with the inflow from two development tunnels downstream of station, is diverted into Honokohau Ditch.

AVERAGE DISCHARGE.--87 years (water years 1914-19, 1923-88, 1991-2005), 39.0 ft³/s (28,280 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,260 ft³/s, January 28, 1988 (gage-height, 8.38 ft for datum and site then in use) from rating curve extended above 3,200 ft³/s, on basis of slope-area measurement at gage height 8.38 ft; minimum, 8.4 ft³/s, May 1, 1945, January 5, 1946.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sep 13	2305	*1,730	*4.25	Sep 15	0045	1,300	4.00

Minimum discharge, 11 ft³/s, Feb 24, Mar 4-9, gage height, 1.42 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	22	58	36	18	12	136	19	22	23	23	93
2	67	18	19	92	24	12	78	19	20	23	33	23
3	19	17	20	18	17	12	90	19	24	32	25	22
4	18	16	20	13	14	12	25	19	19	22	29	24
5	19	18	18	12	13	12	27	19	27	23	21	29
6	18	27	52	12	12	12	34	19	20	20	36	28
7	18	19	106	12	12	12	70	20	44	19	42	73
8	19	17	26	12	12	12	64	20	20	143	282	24
9	18	16	44	56	12	49	93	49	20	133	44	33
10	23	16	25	27	12	224	43	23	26	101	59	26
11	28	16	18	13	63	76	131	20	32	43	56	21
12	19	16	17	12	85	43	39	19	139	156	23	26
13	23	16	17	12	50	16	46	23	30	43	22	190
14	19	368	17	17	14	14	58	33	20	34	22	157
15	18	249	17	13	12	27	63	20	19	208	22	180
16	17	188	16	12	12	14	32	19	19	70	34	111
17	17	45	16	12	13	12	25	19	18	36	24	30
18	18	83	16	20	12	12	22	20	18	54	22	28
19	19	21	16	15	12	12	21	96	56	25	117	21
20	17	19	16	14	12	12	20	66	157	22	37	20
21	17	18	16	26	12	12	20	105	139	75	22	23
22	19	18	16	16	13	12	20	27	49	34	22	29
23	25	19	16	12	13	12	20	22	28	24	22	28
24	21	17	17	12	12	12	20	21	41	23	22	24
25	20	17	16	12	25	12	20	23	27	22	65	19
26	19	17	16	14	30	108	20	20	38	21	26	24
27	30	21	16	184	35	204	20	21	49	20	22	19
28	18	25	39	15	14	420	20	22	23	105	25	20
29	17	32	17	13	---	492	20	30	36	85	23	29
30	18	51	16	12	---	96	19	23	44	52	22	297
31	51	---	16	12	---	65	---	23	---	32	21	---
TOTAL	720	1,442	755	758	585	2,052	1,316	898	1,224	1,723	1,265	1,671
MEAN	23.2	48.1	24.4	24.5	20.9	66.2	43.9	29.0	40.8	55.6	40.8	55.7
MAX	67	368	106	184	85	492	136	105	157	208	282	297
MIN	17	16	16	12	12	12	19	19	18	21	21	19
AC-FT	1,430	2,860	1,500	1,500	1,160	4,070	2,610	1,780	2,430	3,420	2,510	3,310

HAWAII, ISLAND OF MAUI

16620000 HONOKOHAU STREAM NEAR HONOKOHAU—Continued

DISCHARGE, CUBIC FEET PER SECOND—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 2005, BY WATER YEAR (WY)												
MEAN	31.5	41.0	40.5	35.8	36.7	44.6	48.3	40.7	34.3	40.0	40.8	30.6
MAX	94.8	110	97.5	98.6	132	144	120	130	81.1	116	103	122
(WY)	(1915)	(1915)	(1955)	(1916)	(1932)	(1942)	(1980)	(1916)	(1916)	(1914)	(1914)	(1914)
MIN	10.8	11.8	13.0	12.3	13.5	13.4	12.9	12.2	14.2	16.2	14.5	12.1
(WY)	(1985)	(1963)	(1936)	(1944)	(1963)	(1926)	(1992)	(1945)	(1962)	(1926)	(1971)	(1984)
SUMMARY STATISTICS			FOR 2004 CALENDAR YEAR				FOR 2005 WATER YEAR				WATER YEARS 1913 - 2005	
ANNUAL TOTAL				15,814				14,409				39.0
ANNUAL MEAN					43.2				39.5			68.3
HIGHEST ANNUAL MEAN												1914
LOWEST ANNUAL MEAN												24.1
HIGHEST DAILY MEAN			800	Mar 22			492	Mar 29			800	Mar 22, 2004
LOWEST DAILY MEAN			15	Feb 21			12	Jan 5			8.0	Aug 10, 1920
ANNUAL SEVEN-DAY MINIMUM			16	Dec 16			12	Mar 1			8.5	Feb 6, 1985
ANNUAL RUNOFF (AC-FT)			31,370				28,580				28,280	
10 PERCENT EXCEEDS			72				85				79	
50 PERCENT EXCEEDS			25				21				24	
90 PERCENT EXCEEDS			16				12				13	